



Clockwise from top left: (1) Chaparral, Burro Mountain, (2) Cook's tritelia, serpentine chaparral sp., (3) Santa Lucia Bush Mallow, endemic chaparral sp., (4) Vernal Pool (5) Salinas Valley Goldfields, grassland sp., (6) Riparian habitat, Mission Creek; (1-5) Elizabeth Painter photos, (6) Brenda Tharp photo

Chaparral. Chaparral communities consist of drought-resistant evergreen shrubs that grow on California slopes and coastal mesas. Chamise and mixed chaparral are the dominant types on Fort Hunter Liggett, found on 39% of the installation. On Fort Hunter Liggett, chaparral is typically found on ridgetops, south facing slopes and the western mountain range (US Army Reserve Training Center, Fort Hunter Liggett, 2003). Cooper and Perlman (1997) pointed out that Fort Hunter Liggett has “endemic-rich serpentine chaparral.” Fort Hunter Liggett’s serpentine chaparral is generally dominated by *Arctostaphylos obispoensis*, *Adenostoma fasciculatum*, *Quercus durata*, and/or *Ceanothus* spp.

Rare chaparral communities are associated with serpentine areas found along the Coast Ridge Road (at the southwestern boundary with Los Padres National Forest) in training areas 23, 26 and 28 and in training areas 19 (Nacimiento River area). These include both wetland and upland communities. Burro Mountain in training area 23 contains the largest serpentine bed on Fort Hunter Liggett. Wetland communities can be found at Los Burros and Salmon Creeks. Unique endemic plant communities are associated with these formations. The California Native Plant Society lists 285 endemic taxa found mostly or only on serpentine. These taxa make up a major component of California’s endemic species (Skinner & Pavlik 1994, Faber 1997).

Oak Woodlands and Savanna. The oak woodland and oak savanna areas are visually dominant features of the Fort Hunter Liggett landscape, and provide valuable habitat for many species of wildlife. Oak woodlands can be found along the hillsides, protected ravines and canyons and cover 46% of the installation (US Army Reserve Training Center, Fort Hunter Liggett, 2003). Oak savanna is found on flat and alluvial terraces. Fort Hunter Liggett may contain the widest diversity of oak taxa of any area of its size in California. The 12 oak taxa found on Fort Hunter Liggett include valley oak (*Quercus lobata*), blue oak (*Q. douglasii*), coast live oak (*Q. agrifolia* var. *agrifolia*), canyon live oak (*Q.*

chrysolepis), interior live oak (*Q. wislizeni* var. *wislizeni*), shrub interior live oak (*Q. wislizeni* var. *frutescens*), scrub oak (*Q. berberidifolia*), leather oak (*Q. durata* var. *durata*), Tucker’s oak (*Q. john-tukeri*), Shreve oak (*Q. parvula* var. *shrevei*), Alvord oak (*Q. Xalvordiana*), and Jolon oak (*Q. Xjolonensis*) (Painter 2000).

Blue oak woodlands and savanna are the most prevalent oak communities on Fort Hunter Liggett. The installation contains approximately 52,000 acres of blue oak communities, almost one-third of the total land area. While many blue oaks are part of foothill woodlands, pure stands can be found throughout training areas 25 and 29 in the southwestern portion of Fort Hunter Liggett (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

The Valley oak (*Quercus lobata*) plant community, which occurs only in California, is considered by the California Department of Fish and Game to be a rare community type. Less than 100 high quality stands and less than 10,000 acres of high quality habitat remain in California, a significant portion of which is located on Fort Hunter Liggett (California Department of Fish and Game 1999). The valley oak series is also included in the rare California series listed by Sawyer and Keeler- Wolf (1995).

Fort Hunter Liggett has outstanding examples of valley oak savanna and woodland (Pavlik et al., 1991). Over 17,000 acres of valley oak communities straddle the boundary between Fort Hunter Liggett and Los Padres National Forest (see Figure 11: Habitat Types in the “Figures” section). In an effort to control valley oak loss, the Army implemented a Valley Oak Replacement Program in 1997, with the objective of planting and irrigating at least 50 oak seedlings per year. The two-year survival rate is 80% (Clark 2000).

Live oak communities comprise 1,800 acres (or 3%) of Fort Hunter Liggett, occurring frequently in foothill woodlands. Shrub varieties of live oak occur most commonly in the higher elevations. Dominant species include coast live oak, canyon

oak and interior live oak (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

California oaks are currently threatened by the disease known as sudden oak death. First identified in 1995, sudden oak death is caused by the pathogenic fungus, *Phytophthora ramorum*. This pathogen has caused widespread dieback of tanoak and several oak species in the central and northern coastal counties of California, and has to date been associated with 26 different plant species. Infections occur on trunks, branches and leaves. Cankers, brown spots on leaves, and dieback of the tree crown are symptoms of the disease.

Sudden oak death is present in northern Monterey County; however there are no confirmed reports on Fort Hunter Liggett. The California Oak Mortality Task force has documented sudden oak death in portions of northern Monterey County including Pfeiffer Big Sur State Park, Prunedale, and Torrey Canyon (California Oak Mortality Task Force 2003).

Mixed-evergreen forest. Mixed-evergreen forest is found at higher elevations on Fort Hunter Liggett on northfacing slopes. It is dominated by coast live oak (*Quercus agrifolia*), black oak (*Quercus kelloggii*), canyon live oak (*Quercus chrysolepis*), bay (*Umbellularia californica*), madrone (*Arbutus menziesii*), tanoak (*Lithocarpus densiflora*), and maple (*Acer macrophyllum*).

Coniferous forest. Coniferous forest on Fort Hunter Liggett includes closed-cone pine-cypress forest and yellow pine forest. Closed-cone pine-cypress includes Sargent cypress (*Cupressus sargentii*), generally found on serpentine (Kruckeberg 1984). Sargent cypress is included in the rare California series listed by Sawyer and Keeler-Wolf. Yellow pine forest is dominated by ponderosa pine (*Pinus ponderosa*) and Coulter pine (*Pinus coulteri*). A single stand of Santa Lucia fir (*Abies bracteata*) located on Fort Hunter Liggett appears to have been first discovered here in the 19th century. Santa Lucia fir is included in the rare California series listed by Sawyer and Keeler-Wolf.

Rock Outcrops. Rock outcrops on Fort Hunter Liggett are common in the Nacimiento watershed where two larger formations known as the Palisades and the Piedras Atlas are known to occur. Rock outcrops provide unique substrates for plant communities and serve as roosting and nesting sites for raptor species (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

Wildlife

Scientists have recorded over 300 animal species inhabiting Fort Hunter Liggett, including at least 223 breeding and migrant birds, 17 fishes, 19 amphibians, and 11 snakes. This includes essential habitat for 9 Federally/State-listed and candidate animal species, 8 special status (protected or of special concern) mammal species, 18 special status bird species, and 6 special status reptile, amphibian and fish species (see Table 4: Federally and State Listed Threatened and Endangered Species that May Occur on Fort Hunter Liggett and Table 6: Other Special Status Wildlife Species that Occur on Fort Hunter Liggett at the end of this section).

FEDERALLY-LISTED CANDIDATE, THREATENED, AND ENDANGERED SPECIES

San Joaquin Kit Fox (endangered). The kit fox is the smallest member of the dog family in North America. The San Joaquin kit fox (*Vulpes macrotis mutica*) inhabits grasslands, scrublands, oak woodlands, and vernal pool areas in the California Central Valley floor and the interior coastal ranges. On Fort Hunter Liggett, valley bottom areas of the San Antonio and Nacimiento rivers provide potential habitat for the kit fox. Kit fox were present and breeding at Fort Hunter Liggett in 1990; pupping dens were identified in the southeast portion of Fort Hunter Liggett along the San Antonio River (training areas 22 and 25) (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

Decline of the kit fox can be attributed to loss, fragmentation and degradation of habitat due to agricultural, industrial and urban development (Brown, et al. 2002). Loss of habitat is not a threat to kit fox on Fort Hunter Liggett. Fort Hunter

Liggett practices protection measures such as pre-activity surveys to limit the potential impacts of military activity on the kit fox (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

Bald Eagle (threatened). Bald eagles (*Haliaeetus leucocephalus*) at Fort Hunter Liggett are most commonly found wintering along the San Antonio River. An active nesting site has also been located in Training Area 22, between Jolon Road and the San Antonio River (US Army Reserve Training Center, Fort Hunter Liggett, 2003). Nest sites are typically in large trees along shorelines in remote areas. The major threats to the bald eagle for the present and foreseeable future include destruction and degradation of habitat and environmental contaminants.

The bald eagle was Federally-listed as an endangered species in 1971. In 1995, the bald eagle was removed from the endangered list and upgraded to threatened status as its population grew. Delisting of the bald eagle under the Endangered Species Act was proposed by the U.S. Fish and Wildlife Service in 1999. While this rule would remove the bald eagle from protection status under the Endangered Species Act, it would still be protected by the Bald and Golden Eagle Protection Act (60 Federal Register 133, July 12, 1995; 64 Federal Register 128, July 6, 1999).

California Condor (endangered). Suitable habitat for condors (*Gymnogyps californicus*) includes foothill rangeland and forest in remote areas where the birds can roost and nest in tall trees and on cliffs. Rock outcrops in the Nacimiento River Valley provide suitable habitat for condors. Recently a condor was sighted feeding in training area 20 (US Army Reserve Training Center, Fort Hunter Liggett, 2003). The California condor is considered the largest land bird in North America. Although critical habitat was designated in 1976, the condor's vulnerability to extinction required a captive breeding and release program. Captive breeding release sites are located nearby at Pinnacles National Monument and in the Ventana Wilderness Area in Los Padres National Forest.

Least Bell's Vireo (endangered). The Least Bell's vireo (*Vireo belii pusillus*) inhabits riparian woodlands with tall trees and shorter thick shrubs. Loss of riparian habitat, military disturbance, non-native species invasion and predation, and long-term camping threaten the Least Bell's vireo. In 1986, the US Fish and Wildlife Service listed the Least Bell's vireo as endangered. Fort Hunter Liggett contains suitable habitat for the Least Bell's vireo, although the only documented sighting was a single male sited near the Palisades area in 1988 (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

Arroyo Toad (endangered). Arroyo toads (*Bufo microscaphus californicus*) are found in seasonal pools and streams where natural disturbance is common (US Army Reserve Training Center, Fort Hunter Liggett, 2003). A highly sensitive species, arroyo toads are known to have one of the most specialized habitat requirements of any amphibian found in California. Shallow breeding pools with a minimum of silt and free of predatory fish are necessary for successful juvenile development. Breeding pools must be located adjacent to adult habitat that includes inflow channels of 3rd- to greater-order streams with sandy channels and terraces (CDFG 2000). The arroyo toad is threatened by urban development, agriculture and water diversions and was listed as endangered in 1994. Critical habitat designation is pending. Suitable habitat for arroyo toads can be found along stretches of the San Antonio River (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

Red-legged Frog (threatened). California red-legged frogs (*Rana aurora draytonii*) inhabit shrubby riparian areas and deep, slow moving water. Threats to the California red-legged frog include habitat degradation, off-road vehicles, reservoir construction, grazing, non-native aquatic predators, and water quality. Critical habitat for the red-legged frog was designated on March 13, 2001. However, as a result of recent litigation, the red-legged frog critical habitat designation has been vacated, and a revised critical habitat designation will be promulgated



Clockwise from top left: (1) Bald Eagle, (2) Tule Elk, (3) Badger, (4) Mountain Lion (5) Western Pond Turtle, (6) Burrowing Owl; (1) California Department of Fish and Game photo, (2) NPS photo, (3, 4 and 6) John Sorenson photos, (5) U.S. Fish and Wildlife Service photo

following further consideration of the economic impacts of the designation (CDFG 2000; 66 Federal Register 49, March 13, 2001). Although Fort Hunter Liggett contains suitable habitat for the red-legged frog, no frogs have been found during recent surveys. The only known specimens documented were found in the Nacimiento River in 1948 (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

California Tiger Salamander (candidate). The California tiger salamander (*Ambystoma californiense*) can be found in grasslands and low foothill regions in Central and Northern California. Vernal pools and seasonal ponds are required for breeding (CDFG 2000). California tiger salamanders found on Fort Hunter Liggett are hybrids of California tiger salamander and the non-native eastern tiger salamander (*Ambystoma tigrinum*). Biologists have identified sixteen known breeding sites in both the San Antonio and Nacimiento river valleys (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

Vernal Pool Fairy Shrimp (threatened). Vernal pool fairy shrimp (*Branchinecta lynchi*) are small crustaceans that inhabit vernal pools found in grasslands or mud bottomed swales. Threats to the species include destruction of vernal pools from urban development, flood control, agricultural development, highway and utility projects. Vernal pool fairy shrimp were listed as threatened in 1994 (59 Federal Register 180, September 19, 1994).

Recent surveys at Fort Hunter Liggett have identified 59 vernal pools that would provide high quality habitat for the vernal pool fairy shrimp. Of the 59 pools identified, 47 were found to contain vernal pool fairy shrimp. Fort Hunter Liggett limits land use and application of herbicides and pesticides in areas with highly sensitive habitat for vernal pool fairy shrimp (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

Smith's Blue Butterfly (endangered). Smith's blue butterfly (*Euphilotes enoptes smithi*) inhabits coastal sand dunes, serpentine grasslands, and

chaparral in Monterey County. Threatened by development, highway projects, foot and vehicular traffic, Smith's blue butterfly was listed as endangered in 1976 (41 Federal Register 106, June 1, 1976). Although Smith's blue butterfly does not inhabit Fort Hunter Liggett, it is known to occur in adjacent coastal areas (US Army Corps of Engineers 2000b).

Other Protected Species. Fort Hunter Liggett provides important habitat for mountain lion, tule elk, and the ring-tailed cat, state-protected large mammals that require extensive ranges to survive. The installation is part of a major mountain lion stronghold, and hosts 16–20 of these large felines. Tule elk, endemic to California, were once abundant, but declined in the late 19th century. During the Gold Rush era they served as an important source of meat and were hunted to near extinction. By 1874, the herd had declined from an estimated 500,000 head to less than 15 (Deck, et. al., n.d.; Ventana Wildlands Project 2000). They were reintroduced into Fort Hunter Liggett in 1978 and 1981 as part of a federal and state-legislated effort to establish new herds and prevent extinction. Fort Hunter Liggett's oak woodlands and grasslands are now home to a herd of approximately 400–450 tule elk (Fischer 2001). This herd comprises 15%–25% of the total population of tule elk, and is one of only two populations that meet the conditions necessary to sustain long-term genetic diversity (Ventana Wildlands Project 2000). Tule elk travel large distances, make extensive seasonal movements within their range, and therefore require large interconnected tracts of land that preserve a combination of grassland, oak savanna and chaparral. Recovery efforts, including protective legislation, have increased the current population of tule elk in California to more than 2,500. Hunting is allowed to maintain the herd within population objectives established in Fort Hunter Liggett's tule elk management plan (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

FISHERIES

Warmwater fish are the primary seasonal inhabitants of the San Antonio and Nacimiento rivers. Native minnows such as California roach, hitch, Sacramento squawfish, and speckled dace, as well as several gamefish species, may be present throughout most of the river systems when adequate flows are present (winter periods).

Fish populations at Fort Hunter Liggett vary seasonally. As the river flows diminish during summer, some fish become stranded and die. Other fish seek permanent shelter in small isolated pools, such as those found in the Palisades area on the Nacimiento River, where they remain throughout the dry summer and fall (US Army Corps of Engineers 1995). Fishing is prohibited in Fort Hunter Liggett's rivers and streams to protect cultural resources, sensitive species, and to protect the safety of anglers (US Army Reserve Training Center, Fort Hunter Liggett, 2003).

Recreational fishing is permitted in eleven ponds throughout Fort Hunter Liggett. Bass, sunfish, and bluegill natural reproduction is good; however, Fort Hunter Liggett continues to restock to maintain fishable populations. Each year, rainbow trout and other species (bass, catfish, and mosquito fish) are stocked in various ponds and reservoirs for sport fishing.

Visual Resources

While much of the original vegetation within the cantonment area has been replaced by military and residential land uses, the remainder of the installation retains highly scenic qualities associated with the oak woodlands, oak savannas, and riparian zones on the eastern side, and the chaparral covered peaks of the Santa Lucia Range on the west side. Rock outcrops known as the Palisades and Piedras Atlas are exceptionally scenic as they overlook the Nacimiento River.

The rolling oak landscape combined with historic resources such as the Mission San Antonio de

Padua still hold the romantic image of the picturesque Spanish California landscape embodied in Helen Hunt Jackson's famous 1884 novel, *Ramona*. The release of this novel coincided with the arrival of Southern Pacific Railroad. This brought thousands of settlers and tourists to California inspired by this image of the California landscape and spurred the popularity of Mission revival architecture. Although partially compromised by development in the cantonment area, some views from the Milpitas Hacienda are similar to what they were 70 years ago.

Views from Mission San Antonio de Padua are considered sensitive, and training exercises and vehicle movement are restricted near the Mission. Military convoys avoid use of Tank, Mission Creek, and Del Venturi roads on Sundays, and helicopters or other aircraft are prohibited over the Mission unless approved by Range Control. All military field training in that portion of the cantonment area west of Silo and Sulphur Springs roads is prohibited except for light infantry, which is restricted to the west side of the San Antonio River, south of Grid Line 86 (US Army Corps of Engineers, 2000b).

The Army permits public travel on Mission Creek, Del Venturi, Sam Jones (partial), and Nacimiento-Fergusson roads as long as it does not interfere with training or testing activities. Training activities sometimes disturb ground forms and vegetation in areas visible from these roads. Other areas are disturbed in some locations by burning and fire control measures such as firebreaks, as well as by maintenance of roads and training facilities.

Table 4: Federally and State Listed Threatened and Endangered Species that May Occur on Fort Hunter Liggett

SPECIES	STATUS* Federal/State	NOTES
Mammals		
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	E/T	Kit fox has been seen at FHL in training areas 10, 12, 13, 15, 22, 24, 25, the cantonment area and the ASP.
Birds		
Bald Eagle <i>Haliaeetus leucocephalus</i>	T/E	Sightings have occurred in training areas 2, 7, 12, 22, 23, 24, 25, the ASP, and the cantonment area. Training Area 22 contains an active nesting site.
California condor <i>Gymnogyps californianus</i>	E/E	In May 2002, a condor was sited foraging in Training Area 20.
Least Bell's vireo <i>Vireo bellii pusillus</i>	E/E	FHL provides suitable habitat in training areas 7, 22, 25, and 29.
Peregrine falcon <i>Falco peregrinus</i>	Delisted/E	No breeding birds are known to occur at the Palisades or other rock outcrops which provide suitable nesting habitat; wintering birds are known to forage at FHL.
Amphibians		
Arroyo toad <i>Bufo microscaphus</i>	E/-	A 17-mile stretch of the San Antonio River harbors breeding populations of the northern-most occurrence of arroyo toad. This site (on FHL) has been determined to be essential to the recovery of this species.
California red-legged frog <i>Rana aurora draytoni</i>	T/-	Historic sightings are known for FHL; however, there are currently no known occurrences of this species.
California tiger salamander <i>Ambystoma californiense</i>	Candidate/-	There are 16 confirmed breeding pools for California tiger salamander in training areas 10, 12B, 15, 20, 22, and 27.
Invertebrates		
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	T/-	In 2003, 59 high priority vernal pools were found at FHL in training areas 12, 14, 20, 22, 24, 25, 27, the ASP and the cantonment area. Of these 59 pools, 47 contained vernal pool fairy shrimp.
Smith's blue butterfly <i>Euphilotes enoptes smithi</i>	E/-	Potentially occurs at FHL.
Plants		
Santa Lucia Mint <i>Pogogyne clareana</i>	-/E	Occurs only at FHL in training areas 17, 18, 19, and 23.
Dwarf calycadenia <i>Calycadenia villosa</i>	SOC/-	Occurs in training areas 2, 3, 5, 6, 7, 9, 12, 15, 19, 20, 22, 24, 25, 27, and 28.
Purple amole <i>Chlorogalum purpureum</i> var. <i>purpureum</i>	T/-	This variety of purple amole occurs only at FHL. Occurs in grasslands, oak woodlands, the cantonment area, ASP, and training areas, 13, 22, 23, 24, and 25.
Late-flowering mariposa lily <i>Calochortus weedii</i> var. <i>vestus</i>	SOC/-	Occurs in training areas 17, 18, 23, 26, and 28.
Cone Peak bedstraw <i>Galium californicum</i> ssp. <i>luciense</i>	SOC/-	Occurs at the border of training areas 2 and 5 and Training Area 23.
Carmel Valley bush mallow <i>Malacothamnus palmeri</i> var. <i>involucratus</i>	SOC/-	Occurs in training areas 7 and 10

SPECIES	STATUS*	NOTES
	Federal/State	
Morrison's jewel flower <i>Streptanthus morrisonii</i> ssp. <i>morrisonii</i>	SOC/-	Occurs in Training Area 18.
Caper-fruited tropidocarpum <i>Tropidocarpum</i> <i>Capperideum</i>	SOC/-	Occurs in training areas 15 and 24
Hardham's evening-primrose <i>Camissonia hardhamiae</i>	SOC/-	
Prostrate navarretia <i>Navarretia prostrata</i>	SOC/-	
Davidson's bush mallow <i>Malacothamnus davidsonii</i>	SOC/-	
Pale-yellow layia <i>Layia heterotricha</i>	SOC/-	
Hooked popcorn-flower <i>Plagiobothrys uncinatus</i>	SOC/-	
Most beautiful jewel-flower <i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	SOC/-	
South Coast Range morning-glory <i>Calystegia collina</i> ssp. <i>venusta</i>	SOC/-	
San Benito thorn-mint <i>Acanthomintha obovata</i> ssp. <i>obovata</i>	SOC/-	
One-awned spineflower <i>Chorizanthe rectispina</i>	SOC/-	

Sources: US Army Reserve Training Center, Fort Hunter Liggett, 2003; Painter 2004; USFWS 2001; USFWS 2004

ASP= Ammunition Supply Point

FHL= Fort Hunter Liggett

* Status explanations

Federal

E= listed as endangered under the federal Endangered Species Act.

T = listed as threatened under the federal Endangered Species Act.

PE = Proposed for listing as endangered under the federal Endangered Species Act.

Candidate = Former Category 1 candidate. Includes species for which USFWS has on file enough substantial information on biological vulnerability and threat to support proposals to list them.

SOC (Plant Species of Concern) = Former Category 2. Biological information may warrant listing as threatened or endangered, but more information is needed. Species of concern receive no legal protection.

State

E = listed as endangered under the California Endangered Species Act.

T = listed as threatened under the California Endangered Species Act.

****Fort Hunter Liggett has documented species by training area location. See figure, Habitat Types, for the location of training areas.**

Table 5: Other Special Interest Plant Species Documented on Fort Hunter Liggett

SPECIES	STATUS:	STATE	CNPS
<i>Abies bracteata</i> Bristle cone fir		CEQA	1B
<i>Aristocapsa insignis</i> Indian Valley spineflower		CEQA	1B
<i>Baccharis plumerae</i> ssp. <i>glabrata</i> San Simeon baccharis		CEQA	1B
<i>Calycadenia truncata</i> ssp. <i>microcephala</i> Snow Mountain calycadenia		CEQA	1B
<i>Castilleja densiflora</i> ssp. <i>obispoensis</i> Obispo Indian paintbrush		CEQA	1B
<i>Caulanthus coulteri</i> var. <i>lemmonii</i> Lemmon's jewelflower		CEQA	1B
<i>Chorizanthe rectispina</i> Straight-awned spineflower		CEQA	1B
<i>Clarkia jolonensis</i> Jolon clarkia		CEQA	1B
<i>Collinsia antonina</i> San Antonio collinsia		CEQA	1B
<i>Delphinium umbraculorum</i> [on or very near FHL] Umbrella larkspur		CEQA	1B
<i>Eriastrum luteum</i> Yellow-flowered eriastrum		CEQA	1B
<i>Fritillaria viridea</i> San Benito fritillary		CEQA	1B
<i>Galium hardhamiae</i> Hardham's bedstraw		CEQA	1B
<i>Monardella palmeri</i> Palmer's monardella		CEQA	1B
<i>Sidalcea hickmanii</i> ssp. <i>hickmanii</i> Hickman's checkerbloom		CEQA	1B
<i>Streptanthus albidus</i> ssp. <i>paramoenus</i> Metcalf Canyon jewelflower		CEQA	1B
<i>Triteleia ixioides</i> ssp. <i>cookii</i> Cook's triteleia		CEQA	1B
<i>Senecio aphanactis</i> Rayless ragwort		sp	2
<i>Calyptridium parryi</i> var. <i>hesseae</i> Santa Cruz Mountains pussypaws		sp	3
<i>Lupinus albifrons</i> var. <i>abramsii</i> Abram's lupine		sp	3
<i>Micropus amphibolus</i> Mt. Diablo cottonweed		sp	3

SPECIES	STATUS:	STATE	CNPS
<i>Monardella antonina</i> ssp. <i>antonina</i> San Antonio Hills monardella		sp	3
<i>Acanthomintha obovata</i> ssp. <i>obovata</i> San Benito thorn-mint		sp	4
<i>Arabis blepharophylla</i> Coast rock cress		sp	4
<i>Arctostaphylos hooveri</i> Hoover's manzanita		sp	4
<i>Arctostaphylos obispoensis</i> Bishop manzanita		sp	4
<i>Aspidotis carlotta-halliae</i> Carlotta Hall's lace fern		sp	4
<i>Astragalus macrodon</i> Salinas milk-vetch		sp	4
<i>Calandrinia breweri</i> Brewer's calandrinia		sp	4
<i>Chorizanthe douglasii</i> Douglas's spineflower		sp	4
<i>Chorizanthe palmeri</i> Palmer's spineflower		sp	4
<i>Clarkia lewisii</i> Lewis's clarkia		sp	4
<i>Cryptantha rattanii</i> Rattan's cryptantha		sp	4
<i>Delphinium gypsophyllum</i> ssp. <i>parviflorum</i> Small-flowered gypsum-loving larkspur		sp	4
<i>Eriogonum nudum</i> var. <i>indictum</i> Protruding buckwheat		sp	4
<i>Eschscholzia hypecoides</i> San Benito poppy		sp	4
<i>Fritillaria agrestis</i> Stinkbells		sp	4
<i>Galium andrewsii</i> ssp. <i>gatense</i> Serpentine bedstraw		sp	4
<i>Gilia tenuiflora</i> ssp. <i>amplifaucalis</i> Trumpet-throated gilia		sp	4
<i>Horkelia yadonii</i> Santa Lucia horkelia		sp	4
<i>Lasthenia leptalea</i> Salinas Valley goldfields		sp	4
<i>Lessingia tenuis</i> Spring lessingia		sp	4

SPECIES	STATUS:	STATE	CNPS
<i>Lomatium parvifolium</i> Small-leaved lomatium		sp	4
<i>Lupinus cervinus</i> Santa Lucia lupine		sp	4
<i>Malacothamnus jonesii</i> Slender bush mallow		sp	4
<i>Mimulus subsecundus</i> One-sided monkeyflower		sp	4
<i>Mucronea californica</i> California spineflower		sp	4
<i>Navarretia jaredii</i> Paso Robles navaretia		sp	4
<i>Perideridia pringlei</i> Adobe yampah		sp	4
<i>Piperia michaelii</i> Michael's rein orchid		sp	4
<i>Syntrichopappus lemmonii</i> Lemmon's syntrichopappus		sp	4
<i>Systemotheca vortriedei</i> Straight-awned spineflower		sp	4
<i>Zigadenus micranthus</i> var. <i>fontanus</i> Marsh zigadenus		sp	4

Sources: CEMML 1999; Painter 2001; Painter 2004; CDFG 2000b; CDFG 2004.

State

- Sp = Special plants: plants included in California Department of Fish and Game Natural Diversity Database Special Vascular Plant, Bryophytes, and Lichens List (July 2001; April 2004)
- CEQA = Species which meet the criteria for listing, even if not included on any list, as described in Section 15380 of the California Environmental Quality Act (CEQA) Guidelines

CNPS

- 1A = Presumed Extinct in California
- 1B = Rare or Endangered in California and Elsewhere
- 2 = Rare or Endangered in California More Common Elsewhere
- 3 = Need More Information
- 4 = Plants of Limited Distribution

Table 6: Other Special Status Wildlife Species that Occur on Fort Hunter Liggett

SPECIES	CA STATUS
Mammals	
American badger, <i>Taxidea taxus</i>	Special Concern
Monterey dusky-footed woodrat, <i>Neotoma fuscipes luciana</i>	Special Concern
Mountain lion, <i>Felix concolor</i>	Protected
Pale big-eared bat, <i>Plecotus townsendii palescens</i>	Special Concern
Pallid bat, <i>Antrozus pallidus</i>	Candidate - needs confirmation
Ring-tailed cat, <i>Bassariscus astutus</i>	Protected
Salinas pocket mouse, <i>Perognathus inornatus psammophilus</i>	Special Concern
Tule elk, <i>Cervus elaphus nannodes</i>	Protected
Birds * = breeding species; others are winterers or migrants	
American white pelican, <i>Pelecanus erythrorhynchos</i>	Special Concern
Black swift, <i>Cypseloides niger</i>	Special Concern
Burrowing owl, <i>Athene cunicularia</i>	Special Concern
California gull, <i>Larus californicus</i>	Special Concern
Double-crested cormorant, <i>Phalacrocorax auritus</i>	Special Concern
Ferruginous hawk, <i>Buteo regalis</i>	Special Concern
Golden eagle*, <i>Aquila cyrsaetos</i>	Special Concern
Long-eared owl*, <i>Asio otus</i>	Special Concern
Northern harrier*, <i>Circus cyaneus</i>	Special Concern
Osprey, <i>Pandion halietus</i>	Special Concern
Prairie falcon*, <i>Falco mexicanus</i>	Special Concern
Purple martin*, <i>Progne subis</i>	Special Concern
Sharp-shinned hawk*, <i>Accipiter striatus</i>	Special Concern
Short-eared owl, <i>Asio flammeus</i>	Special Concern
Tricolored blackbird*, <i>Agelaius tricolor</i>	Special Concern
Western grebe*, <i>Aechmophorus occidentalis</i>	Candidate
Yellow-breasted chat*, <i>Icteria virens</i>	Special Concern
Yellow warbler*, <i>Dendroica petechia brewsteri</i>	Special Concern
Reptiles	
Coast horned lizard, <i>Phrynomosa coronatum frontale</i>	Special Concern
Western pond turtle, <i>Clemmys marmorata pallida</i>	Special Concern
Amphibians	
Foothill yellow-legged frog, <i>Rana boylei</i>	Special Concern
Western spadefoot toad, <i>Scaphiophus hammondi</i>	Special Concern
Fish	
Hardhead, <i>Mylopharodon conocephalus</i>	Special Concern
San Joaquin Roach, <i>Lavinia symmetricus ssp.</i>	Special Concern - needs confirmation